

SP-L5 Fuel-Load Management Evaluation

December 11, 2001

1.0 Introduction/Background

Relicensing stakeholders have expressed concern that historic land management and fire prevention activities within the Study Area have resulted in increased fuel-loading which has led to an increased risk of destructive wildfires. Obtaining current fuel-load information for the Study Area could facilitate an evaluation of wildfire risk on project lands. In addition, techniques for managing and reducing fuel-loads should be investigated and the associated potential impacts to resources evaluated. Finally, existing fuel-load conditions on project lands and their implications for surrounding communities should be presented, along with recommendations regarding fuel-load management and reduction techniques.

2.0 Study Objectives

The objectives of this study are to:

- Provide information that can be used to determine fuel-loads within the Study Area;
- Discuss and evaluate the efficiency level and/or drawbacks of various fuel-load management and reduction methods;
- Communicate such information to other work groups early in the study process for their use and evaluation;
- Summarize the analyses of other work groups with regard to the effects that various fuel-load management and reduction methods could have on resources; and,
- Suggest preferred fuel-load management and reduction techniques.

3.0 Relationship to Relicensing/Need for the Study

Although the Federal Energy Regulatory Commission (FERC) does not require fuel-load studies as part of the relicensing process, potentially destructive wildfire is an issue that managers of lands in the California foothills need to address. An understanding of current and potential fuel-load management within the Study Area would assist efforts to reduce the likelihood and/or severity of destructive wildfires. It must be noted, however, this study is not a fire management study.

4.0 Study Area

The Study Area includes Lake Oroville, the lands and waters within and adjacent to (1/4 mile) the FERC project boundary, and adjacent lands, facilities, and areas with a clear project nexus.

5.0 General Approach

Task 1—Assessment of Current Fuel-Loads within the Study Area

A literature and data review of appropriate Study Area-related land management and fire control data will be conducted. California Department of Fish and Game's (CDF's) Fire Protection Division personnel, websites, GIS databases and published documents will be the primary sources of data. Data acquired by the Environmental Work Group concerning vegetation types will also be useful for characterizing fuel-load conditions.

The Butte County Fire Safety Council's Pre-Fire Engineer will be consulted and will provide relevant data, such as a surface fuels model map for the Study Area. The map will be based upon a 30-meter grid. Ground-truthing of existing conditions will not be conducted as part of this study.

Photographs of representative areas within the Study Area will be taken to illustrate existing conditions and to serve as a baseline record if treatments to fuel-loads are made. The photographs will assist with the evaluation of the aesthetic aspects related to fuel-load management treatments.

Task 2—Identify Successful Fuel Reduction Management Programs

This task will begin by conducting literature reviews and interviews with CDF staff regarding fuel management and treatment. The CDF's California Fire Plan will be consulted as will other CDF information regarding various fuel management and treatment techniques. In addition, land management and fire control officials from the United States Forest Service (USFS), Bureau of Land Management (BLM), the City of Oroville, Butte County, and other entities if appropriate, will be interviewed regarding ongoing fuel reduction programs. The literature and data review will include a search for information on fuel-load management programs at other similar locations in California.

During Task 2, the Engineering and Operations; Environmental; Cultural Resources; and Recreation and Socioeconomics Work Groups will be consulted. The potential effects of various fuel management and treatment techniques on resources will be evaluated and compared prior to the assessments made under Task 3.

Task 3—Suggest Fuel Reduction Strategies

Task 3 will take the information gathered in the previous tasks and synthesize it into a series of suggested measures that could be taken to reduce fuel-loading. This task will not entail a fire reduction or management plan, but will contain data and suggestions that could be expanded in order to develop such a plan. The suggested measures developed in this task could be used to develop protection, mitigation and enhancement measures (PMEs).

6.0 Results and Products/Deliverables

Results

As a result of this study, areas within the Study Area will be identified in terms of existing fuel-load type and assessment of conditions. In addition, the effectiveness of various fuel-load management and reduction techniques will be identified. The required frequency for applying appropriate fuel-load management measures will also be identified.

Products/Deliverables

The following products will be developed for this study:

- Interim Fuel-Load Report
- Fuel-Load Report

The reports will summarize the study's findings and the suggestions made under Task 3. Maps that identify different fuel-load conditions will be included, as will photographs of existing conditions. Suggestions for fuel-load management techniques will be made. If a monitoring program is identified as beneficial, the program may be included as part of the reports.

7.0 Coordination and Implementation Strategy

Coordination with Other Resource Areas/Studies

This study will involve working closely the Engineering and Operations; Environmental; Cultural Resources; and Recreation and Socioeconomics Work Groups. Different groups will be able to combine efforts to obtain baseline data. The Land Use research team will determine how existing or potential new management actions or policies associated with suggestions from the other work groups could influence fuel-loads within the Study Area. Prior to starting the study, the team will meet with other work groups to determine where and when relevant data can be gathered and shared among all groups. The research team will maintain communication with the groups as suggestions are developed to ensure that they are acceptable to all teams.

Issues, Concerns, Comments Tracking and/or Regulatory Compliance

This study will address Issue Statement LM2—existing and future fuel-loads, fuel management practices, and coordination of fuel management activities for lands located within and adjacent to the project boundary to manage the risk of loss of property, lives and natural resources. The following associated Issues will also be addressed:

- Issue LM E6—fuel-loads on state lands
- Issue LM E7—fuel management on National Forest System lands
- Issue LM E10—current fire management practices on adjacent lands
- Issue LM E14—evaluate fuel-loading within the project area

8.0 Study Schedule

Data collection: March through August 2002.

Data analysis and report writing: June through December 2002.

Interim Fuel-Load Report due: February 2003.

Final Fuel-Load Report Due: June 2003.